March 7, 2003 Certified Mail 9059 7400

Julius M. Blanco
Marathon Ashland Petroleum, LLC
1304 Olin Avenue
Indianapolis, IN 46222-3294

Re: 089-16719-00231
First Significant Permit Modification to:
Part 70 permit No.: T089-7400-00231

Dear Mr. Blanco:

Marathon Ashland Petroleum, LLC was issued Part 70 operating permit T089-7400-00231 on December 30, 1997 for a Bulk Petroleum Storage and Terminal. A letter requesting changes to this permit was received on October 25, 2002. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of the addition of an internal floating roof with mechanical shoe seal to existing storage tank 55-3 to allow the storage of gasoline. Tank 55-3 will now be subject to the NSPS of Subpart Kb of 40 CFR 60, Code of Federal Regulations. The permit modification will consist of moving Tank 55-3 from Section D.8 to a new Section D.4 in your Part 70 permit. The existing Section D.4 for the Groundwater Treatment System will be moved to a new Section D.9 in order to be consistent with the order of emission units in Section A, Source Summary.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (219) 853-6306 and ask for Ronald Holder.

Sincerely,

Ronald L. Novak, Director
Hammond Department of Environmental Management
Air Pollution Control Division

Attachments
RH
cc: IDEM-OAQ – Permits Administration – Mindy Hahn

PART 70 OPERATING PERMIT
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Marathon Ashland Petroleum LLC
(previously known as Marathon Oil Company)
4206 Columbia Avenue
Hammond, Indiana 46327

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the facilities listed in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: **T089-7400-00231**	
Original Issued by: Felicia R. George, Assistant Commissioner Office of Air Management	Issuance Date: December 30, 1997

First Administrative Permit Amendment 089-9324, issued on 3/23/98.
Second Administrative Amendment 089-11140, issued on 7/20/99.
Third Administrative Amendment 089-13941, issued on 3/5/01.
Fourth Administrative Amendment: 089-14613, issued on 8/7/01.

First Significant Permit Modification: **089-16719**	Pages Affected: 1, 4, 5, 7, 8, 36, 38-45
Issued by: _____ Ronald L. Novak, Director Hammond Department of Environmental Management	Issuance Date: **March 7, 2003**

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) and Hammond Department of Environmental Management, and presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary Bulk Petroleum Products Distribution Terminal.

Responsible Official:	District Manager or Manager, Terminal, Transport & Marine
Source Address:	4206 Columbia Avenue, Hammond, Indiana 46327
Mailing Address:	HESS – TT&M 539 South Main Street, Findlay, OH 45840
SIC Code:	5171 - Petroleum Bulk Terminal
County Location:	Lake County
County Status:	Nonattainment for TSP, PM10 (moderate), SO2, NO2, & Ozone (severe)
Source Status:	Part 70 Permit Program Major Source under PSD and Emission Offset Rules

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This Stationary source consists of the following emission units and pollution control devices:

(1) One (1) Tank Truck Loading Operation where gasoline and fuel oil are bottom-loaded into transport trucks. Displaced hydrocarbon emissions are controlled by a John Zink Carbon Adsorption/Absorption Vapor Recovery Unit (VRU). The loading operation includes three (3) loading racks and has a maximum loading capacity of 841,000,000 gallons per year. This operation also utilizes a stand-by control device: one (1) Portable Trailer Mounted Vapor Combustor.

This facility was last source-tested on December 11, 1990 for compliance with the New Source Performance Standard (40 CFR Part 60, Subpart XX: Standards of Performance for Bulk Gasoline Terminals) limit of 35 mg/l.

(2) Four (4) petroleum liquid (gasoline) storage tanks, identified as tanks No. 217-14, 125-10, 80-15, and 80-8. Tank specifications are as follows:

(a) Storage Tank No. 217-14 has an internal floating roof with a mechanical shoe type seal with rim mounted secondary seal and has a maximum capacity of 9,114,000 gallons.

(b) Storage Tank No. 125-10 has an internal floating roof with a mechanical shoe type seal and has a maximum capacity of 5,250,000 gallons.

(c) Storage Tank No. 80-15 has an internal floating roof with a mechanical shoe type seal and has a maximum capacity of 3,360,000 gallons.

(d) Storage Tank No. 80-8 has an internal floating roof with a mechanical shoe type seal and has a maximum capacity of 3,360,000 gallons.

(3) Four (4) petroleum liquid (gasoline) storage tanks, identified as tanks No. 80-7, 80-6, 80-2, and 55-12. Tank specifications are as follows:

(a) Storage Tank No. 80-7 is an open floater tank equipped with a geodesic dome. The floating roof is equipped with a mechanical shoe seal and rim mounted secondary seal. The tank has a maximum capacity of 3,360,000 gallons.

(b) Storage Tank No. 80-6 is an open floater tank equipped with a geodesic dome. The floating roof is equipped with a mechanical shoe type seal. The tank has a maximum capacity of 3,360,000 gallons.

(c) Storage Tank No. 80-2 is an open floater tank equipped with a geodesic dome. The floating roof is equipped with a mechanical shoe type seal. The tank has a maximum capacity of 3,360,000 gallons.

(d) Storage Tank No. 55-12 has an internal floating roof with a mechanical shoe type seal and has a maximum capacity of 2,310,000 gallons.

(4) One (1) Petroleum Liquid Storage Tank, identified as Tank 55-3 with the following specifications:

Tank 55-3 has an internal floating roof equipped with a mechanical shoe seal for the storage of gasoline or less volatile petroleum products.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons. This includes storage Tank No. AA-1-3, a fixed cone roof tank with a maximum design capacity of 462 gallons.

(2) The following storage tanks which emit less than one (1) ton per year of a single HAP and less than fifteen (15) pounds per day of VOC:

(a) Fixed-cone roof Kerosene storage tank No. 80-11 with a maximum design capacity of 3,360,000 gallons

(b) Fixed-cone roof #2 fuel oil storage tank No. 80-1 with a maximum design capacity of 3,360,000 gallons.

(c) Fixed-cone roof #2 fuel oil storage tank No. 80-9 with a maximum design capacity of 3,277,596 gallons.

(d) Fixed-cone roof #2 fuel oil storage tank No. 80-4 with a maximum design capacity of 3,360,000 gallons.

(e) Internal floating roof transmix storage tank No. T-5 with a maximum design capacity of 67,914 gallons. This tank is equipped with a mechanical shoe seal.

(f) Internal floating roof transmix storage tank No. T-13 with a maximum design capacity of 188,370 gallons. This tank is equipped with mechanical shoe seal.

(g) Horizontal fixed roof red dye additive storage tank No. AA-1-3 with a maximum design capacity of 462 gallons.

(h) Fixed-cone roof gasoline additive storage tank No. AA-8-1 with a maximum design capacity of 7,980 gallons.

(i) Fixed-cone roof gasoline additive storage tank No. AA-8-2 with a maximum design capacity of 7,980 gallons.

(3) One (1) Groundwater Treatment System including an air stripper with a maximum design rate of 1800 gallons per hour. The system is used to remove hydrocarbons on the terminal site.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because it is a major source, as defined in 326 IAC 2-7-1(22).

A.5 Prior Permit Conditions Superseded [326 IAC 2]

The terms and conditions of this permit incorporate all the current applicable requirements for all emission units located at this source, and supersede all terms and conditions in all registrations and permits, including construction permits, issued prior to the date of issuance of this permit. All terms and conditions in such registrations and permits are no longer in effect.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

(a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.

(b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15.

B.2 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-7-7(a)]

(a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM and HDEM.

(b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

(c) All terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by the Hammond Department of Environmental Management.

B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.6 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

(b) The Permittee shall furnish to IDEM - OAM and HDEM, within a reasonable time, any information that IDEM - OAM and HDEM, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.

(c) Upon request, the Permittee shall also furnish to IDEM, OAM and HDEM copies of records required to be kept by this permit. For information claimed to be confidential, the Permittee shall furnish such records IDEM, OAM **and HDEM** along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, the Permittee shall furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; or for

(3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

(a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) A responsible official is defined in 326 IAC 2-7-1(34).

B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually certify that the source has complied with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than **April 15** of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM and HDEM on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM - OAM and HDEM may require to determine the compliance status of the source.

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission units and associated emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM and HDEM upon request and shall be subject to review and approval by IDEM, OAM and HDEM.

B.13 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM - OAM and HDEM within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM
Telephone Number: 1-800-451-6027 (ask for Office of Air Management, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

HDEM
Telephone Number: 219-853-6306
Facsimile Number: 219-853-6343

(5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(33).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM - OAM and HDEM may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM - OAM and HDEM by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.14 Permit Shield [326 IAC 2-7-15]

(a) Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided either of the following:

(1) The applicable requirements are included and specifically identified in this permit;

(2) IDEM - OAM and HDEM, in acting on the Part 70 permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 permit includes the determination or a concise summary thereof.

(b) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.

(c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement, IDEM - OAM and HDEM shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM and HDEM has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM - OAM or HDEM has issued the modification. [326 IAC 2-7- 12(b)(8)]

B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

within ten (10) calendar days from the date of the discovery of the deviation.

(b) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent.

(c) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM - OAM or HDEM determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM - OAM, or HDEM to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM - OAM, or HDEM at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM - OAM and HDEM may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.18 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM - OAM and HDEM, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(20).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM and HDEM on or before the date it is due. [326 IAC 2-5-3]

(2) If IDEM - OAM or HDEM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM - OAM and HDEM**,** takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM - OAM and HDEM**,** any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]

If IDEM - OAM and HDEM fail to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.19 Administrative Permit Amendment [326 IAC 2-7-11]

(a) An administrative permit amendment is a Part 70 permit revision that makes changes of the type specified under 326 IAC 2-7-11(a).

(b) An administrative permit amendment may be made by IDEM - OAM or HDEM, consistent with the procedures specified under 326 IAC 2-7-11(c).

(c) The Permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.20 Minor Permit Modification [326 IAC 2-7-12]

(a) A permit modification is any revision to this permit that cannot be accomplished as an administrative permit amendment under 326 IAC 2-7-11.

(b) Minor modification to this permit shall follow the procedures specified under 326 IAC 2-7-12(b), except as provided by 326 IAC 2-7-12(c).

(c) An application requesting the use of minor modification procedures shall meet the requirements of 326 IAC 2-7-12(b) and shall include the information required in 326 IAC 2-7-12(b)(3)(A) through (E).

(d) The Permittee may make the change proposed in its minor permit modification application immediately after it files such application provided that the change has received any approval required by 326 IAC 2-1. After the Permittee makes the change allowed under minor permit modification procedures, and until IDEM,OAM and HDEM takes any of the actions specified in 326 IAC 2-7-12(b)(6)(A) through (C), the Permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this period, the Permittee need not comply with the existing permit terms and conditions it seeks to modify. If the Permittee fails to comply with its proposed permit

terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it. [326 IAC 2-7-12(b)(7)]

B.21 Significant Permit Modification [326 IAC 2-7-12(d)]

(a) Significant modification procedures shall be used for applications requesting permit modifications that do not qualify as minor permit modifications or as administrative amendments.

(b) Every significant change in existing monitoring permit terms or conditions and every relaxation of reporting or record keeping permit terms or conditions of this permit shall be considered significant.

(c) Nothing in 326 IAC 2-7-12(d) shall be construed to preclude the Permittee from making changes consistent with 326 IAC 2-7 that would render existing permit compliance terms and conditions irrelevant.

(d) Significant modifications of this permit shall meet all requirements of 326 IAC 2-7, including those for application, public participation, review by affected states, review by the U.S. EPA, and availability of the permit shield, as they apply to permit issuance and renewal.

B.22 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]
[326 IAC 2-7-12 (b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.23 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

(a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

(b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

B.24 Operational Flexibility [326 IAC 2-7-20]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-1 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM - OAM and HDEM in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

(b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM - OAM, HDEM or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.25 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.26 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of IDEM or HDEM identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM - OAM, HDEM, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
[326 IAC 2-7-6(6)]

B.27 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]

Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM - OAM, Permits Branch and HDEM, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11.

(c) IDEM - OAM and HDEM shall reserve the right to issue a new permit.

B.28 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

(a) The Permittee shall pay annual fees to IDEM, OAM and HDEM within thirty (30) calendar days of receipt of a billing, or in a time period consistent with the fee schedule established in 326 IAC 2-7-19.

(b) Failure to pay may result in administrative enforcement action, or revocation of this permit.

(c) If the Permittee does not receive a bill from IDEM, OAM, thirty (30) calendar days before the due date, the Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee. The applicable fee is due April 1 of each year.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Major Source

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-3 (Emission Offset), this source is a major source.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

(a) Visible emissions shall not exceed an average of twenty percent (20%) opacity in twenty- four (24) consecutive readings, as determined in 326 IAC 5-1-4.

(b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

This condition is not federally enforceable.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. This condition is not federally enforceable.

C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. This condition is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-1-11.1]

The Permittee shall be in violation of 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), if the opacity of fugitive particulate emissions exceeds ten percent (10%). Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 9.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit shall be operated at all times that the emission unit vented to the control equipment is in operation, as described in Section D of this permit.

C.7 Asbestos Abatement Projects - Accreditation [326 IAC 14-10] [326 IAC 18]
[40 CFR 61, Subpart M]

Prior to the commencement of any demolition or renovation activities, the Permittee shall use an Indiana accredited asbestos inspector to inspect thoroughly the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable asbestos containing material. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.8 Performance Testing [326 IAC 3-2.1]

(a) All testing shall be performed according to the provisions of 326 IAC 3-2.1 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

no later than thirty-five (35) days before the intended test date.

(b) All test reports must be received by IDEM - OAM and HDEM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM - OAM and HDEM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.9 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

(a) Has certified that all facilities at this source are in compliance with all applicable requirements;

(b) Has submitted a statement that the Permittee will continue to comply with such requirements; and

(c) Will continue to comply with such requirements that become effective during the term of this permit.

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee shall notify:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

in writing, no more than ninety (90) days after receipt of this permit, with full justification of the reasons for the inability to meet this date and a schedule which it expects to meet. If a denial of the request is not received before the monitoring is fully implemented, the schedule shall be deemed approved.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.11 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.12 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) asbestos removal or demolition start date;

(B) removal or demolition contractor; or

(3) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and to:

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

(e) Procedures for Asbestos Emission Control

The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector

The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on March 31, 1997.

(b) If the ERP is disapproved by IDEM - OAM and HDEM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP. If after this time, the Permittee does not submit an approvable ERP then IDEM - OAM and HDEM shall supply such a plan.

(c) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(d) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(e) Upon direct notification by IDEM - OAM and HDEM that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

(f) Upon direct notification by IDEM - OAM or HDEM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

(a) Submit:

(1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or

(2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

(3) A verification to IDEM - OAM and HDEM that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

(b) Provide annual certification to IDEM - OAM and HDEM that the Risk Management Plan is being properly implemented.

C.15 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5(3)]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM - OAM and HDEM upon request and shall be subject to review and approval by IDEM - OAM and HDEM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM - OAM and HDEM within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM - OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM - OAM and HDEM within thirty (30) days of receipt of the notice of deficiency. IDEM - OAM and HDEM reserve the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM - OAM and HDEM that retesting in one-hundred and twenty (120) days is not practicable, IDEM - OAM and HDEM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) The Permittee shall submit a certified, annual emission statement that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM - OAM and HDEM on or before the date it is due.

C.18 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

(a) With the exception of performance tests conducted in accordance with Section C - Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM - OAM and HDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)(B)]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location and available within one (1) hour upon verbal request of an IDEM - OAM or HDEM representative, for a minimum of three (3) years. They may be stored elsewhere for the remaining two (2) years providing they are made available within thirty (30) days after written request.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytical techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and to:

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM - OAM and HDEM on or before the date it is due.

(c) Unless otherwise specified in this permit, any report required shall be submitted within thirty (30) days of the end of the reporting period.

(d) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) An emergency as defined in 326 IAC 2-7-1(12); or

(3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

(e) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(f) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

(1) One (1) Tank Truck Loading Operation where gasoline and fuel oil are bottom-loaded into transport trucks. Displaced hydrocarbon emissions are controlled by a John Zink Carbon Adsorption/Absorption Vapor Recovery Unit (VRU). The loading operation includes three (3) loading racks and has a maximum loading capacity of 841,000,000 gallons per year. This operation also utilizes a stand-by control device: one (1) Portable Trailer Mounted Vapor Combustor.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds (VOC)

(a) Pursuant to 326 IAC 12 and 40 CFR 60, Subpart XX (Standards of Performance for Bulk Gasoline Terminals), Section 60.502(b), the emissions to the atmosphere from the vapor collection system or backup trailer mounted flare due to the loading of liquid product into gasoline tank trucks are not to exceed 35 milligrams of total organic compounds per liter of gasoline loaded.

(b) Loading of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the procedures as outlined in 40 CFR 60.502(e) and 326 IAC 8-4-9(b).

(c) The vapor control system shall be operated in accordance with the requirements of 40 CFR 60.502(h), (i), and 326 IAC 8-4-9(d).

(d) The backup portable trailer mounted vapor combustor shall be designed and operated to meet the following requirements, at all times when emissions may be vented to this control device:

(1) no visible emissions except for periods not to exceed 5 minutes in a two hour period,

(2) flare pilot flame present as determined through the use of a thermocouple or any other equivalent device to detect the presence of a flame,

(3) gas being combusted shall have a heat content of 300 Btu/scf or greater, and

(4) an exit velocity less than 55 ft/sec.

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control equipment.

Compliance Determination Requirements

D.1.3 Testing Requirements [326 IAC 2-7-6(1)]

A compliance stack test shall be performed to demonstrate compliance with the VOC limit of (35) mg/l of gasoline loaded at the exhaust of the vapor control system. The test shall be completed within twenty-four (24) months of issuance of this permit and repeated no less than once every 5 years thereafter. Testing shall be performed in accordance with 326 IAC 3-2.1 using methods acceptable to the Commissioner.

D.1.4 Each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks in accordance with 40 CFR 60.502(j). The source of the leak shall be repaired within 15 calendar days after it is detected.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.5 The permittee shall install and maintain a monitor to detect the presence of a flame at the flare tip. The presence of a flame at the flare tip shall be monitored at all times when the vapors are being vented to the flare. The monitor shall be equipped with an automatic alarm which activates when the presence of a flame is not detected during periods when gasoline vapors are being vented to the flare.

The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the visible emissions notations are abnormal for any one observation.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.6 In accordance with 40 CFR 60.505(b), the documentation file for each gasoline tank truck shall be updated at least once per year to reflect current test results as determined by Method 27. This documentation shall include, as a minimum, the following:

(1) Test title: Gasoline Delivery Tank Pressure Test - EPA Reference Method 27

(2) Tank owner and address

(3) Tank identification number

(4) Testing location

(5) Date of test

(6) Tester name and signature

(7) Witnessing inspector, if any: Name, signature, and affiliation

(8) Test results: Actual pressure change in 5 minutes, mm of water (average for 2 runs).

(9) Records of repairs including the date of the repair, the type of repair, and the date of the retest.

The records must be maintained in a legible, readily available condition for at least two (2) years after the date the testing or repair was completed. [326 IAC 8-4-9(f)].

D.1.7 Records of each monthly leak inspection shall be maintained for at least two (2) years. As a minimum, the following information shall be included in accordance with 40 CFR 60.505(c):

(1) Date of inspection

(2) Findings (may indicate no leaks discovered; or location, nature, and severity of each leak).

(3) Leak determination method

(4) Corrective action (date each leak repaired; reasons for any repair interval in excess of 15 days).

(5) Inspector name and signature.

D.1.8 Records of the types of volatile petroleum liquid loaded and the maximum true vapor pressure of the liquid as loaded shall be maintained for a minimum of 36 months and made available upon request by IDEM - OAM or HDEM.

D.1.9 Reporting Requirements

There are no reporting requirements for this facility.

SECTION D.2 FACILITY OPERATION CONDITIONS

(2) Four (4) petroleum liquid (gasoline) storage tanks, identified as tanks No. 217-14, 125-10, 80-15, and 80-8. Tank specifications are as follows:

(a) Storage Tank No. 217-14 has an internal floating roof with a mechanical shoe type seal with rim mounted secondary seal and has a maximum capacity of 9,114,000 gallons.

(b) Storage Tank No. 125-10 has an internal floating roof with a mechanical shoe type seal and has a maximum capacity of 5,250,000 gallons.

(c) Storage Tank No. 80-15 has an internal floating roof with a mechanical shoe type seal and has a maximum capacity of 3,360,000 gallons.

(d) Storage Tank No. 80-8 has an internal floating roof with a mechanical shoe type seal and has a maximum capacity of 3,360,000 gallons.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Volatile Organic Compounds (VOC)

These storage tanks are subject to the standards applicable to internal floating roof as outlined in 40 CFR 60.112(a)(1), 326 IAC 8-4-3(b), and 326 IAC 8-9-4(c).

Compliance Determination Requirements

D.2.2 Testing Requirements [326 IAC 2-7-6(1)]

Testing of this facility is not specifically required by this permit. However, this does not preclude testing requirements on this facility under 326 IAC 2-1-4(f) and 326 IAC 2-7-6(1).

D.2.3 The inspection, repair, and notification requirements of 326 IAC 8-9-5(b) shall be applicable to each storage tank.

In accordance with 326 IAC 8-9-5(b)(2) and 326 IAC 8-9-6(c)(2), if, during the required annual visual inspection, the internal floating roof is not resting on the surface of the VOL, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the vessel from service within forty-five (45) days.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.4 There are no specific compliance monitoring requirements applicable to this facility.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.5 In accordance with 326 IAC 8-9-6(b), records of each vessel including the vessel identification number, dimensions, capacity, and a description of the emission control equipment shall be maintained for the life of the vessel.

D.2.6 In accordance with 326 IAC 8-9-6(c), a record of each inspection performed shall be maintained and shall identify the following:

(1) The vessel identification number

(2) The date of the inspection

(3) The observed condition of the seal, internal floating roof, and fittings.

D.2.7 In accordance with 40 CFR 60.113(a) and 326 IAC 8-4-3(d), records of the types of volatile petroleum liquid stored, the period of storage and the maximum true vapor pressure of the liquid as stored during the respective storage period shall be maintained for a minimum of 36 months and made available upon request by IDEM - OAM or HDEM.

D.2.8 Reporting Requirements

A report of any defects (the internal floating roof is not resting on the surface of the VOL, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric) discovered shall be furnished to the department within thirty (30) days of the inspection. The report shall identify the vessel identification number, the nature of the defects, and the date the vessel was emptied or the nature of and date the repair was made.

SECTION D.3 FACILITY OPERATION CONDITIONS

(3) Four (4) petroleum liquid (gasoline) storage tanks, identified as tanks No. 80-7, 80-6, 80-2, and 55-12. Tank specifications are as follows:

(a) Storage Tank No. 80-7 is an open floater tank equipped with a geodesic dome. The floating roof is equipped with a mechanical shoe seal and rim mounted secondary seal. The tank has a maximum capacity of 3,360,000 gallons.

(b) Storage Tank No. 80-6 is an open floater tank equipped with a geodesic dome. The floating roof is equipped with a mechanical shoe type seal. The tank has a maximum capacity of 3,360,000 gallons.

(c) Storage Tank No. 80-2 is an open floater tank equipped with a geodesic dome. The floating roof is equipped with a mechanical shoe type seal. The tank has a maximum capacity of 3,360,000 gallons.

(d) Storage Tank No. 55-12 has an internal floating roof with a mechanical shoe type seal and has a maximum capacity of 2,310,000 gallons.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Volatile Organic Compounds (VOC)

These storage tanks are subject to the standards applicable to internal floating roof as outlined in 326 IAC 8-4-3(b) and 326 IAC 8-9-4(c).

Compliance Determination Requirements

D.3.2 Testing Requirements [326 IAC 2-7-6(1)]

Testing of this facility is not specifically required by this permit. However, this does not preclude testing requirements on this facility under 326 IAC 2-1-4(f) and 326 IAC 2-7-6(1).

D.3.3 The inspection, repair, and notification requirements of 326 IAC 8-9-5(b) shall be applicable to each storage tank.

In accordance with 326 IAC 8-9-5(b)(2) and 326 IAC 8-9-6(c)(2), if, during the required annual visual inspection, the internal floating roof is not resting on the surface of the VOL, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the vessel from service within forty-five (45) days. Records of such incidents shall be maintained and a report shall be furnished to the department within thirty (30) days of the inspection. The report shall identify the vessel identification number, the nature of the defects, and the date the vessel was emptied or the nature of and date the repair was made.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.4 There are no specific compliance monitoring requirements applicable to this facility.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.5 In accordance with 326 IAC 8-9-6(b), records of each vessel including the vessel identification number, dimensions, capacity, and a description of the emission control equipment shall be maintained for the life of the vessel.

D.3.6 In accordance with 326 IAC 8-9-6(c), a record of each inspection performed shall be maintained and shall identify the following:

(1) The vessel identification number

(2) The date of the inspection

(3) The observed condition of the seal, internal floating roof, and fittings.

D.3.7 Records of the types of volatile petroleum liquid stored and the maximum true vapor pressure of the liquid as stored shall be maintained for a minimum of 36 months and made available upon request by IDEM - OAM or HDEM. [326 IAC 8-4-3(d)].

D.3.8 Reporting Requirements

A report of any defects (the internal floating roof is not resting on the surface of the VOL, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric) discovered shall be furnished to the department within thirty (30) days of the inspection. The report shall identify the vessel identification number, the nature of the defects, and the date the vessel was emptied or the nature of and date the repair was made.

SECTION D.4 FACILITY OPERATION CONDITIONS

One (1) Petroleum Liquid Storage Tank, identified as Tank 55-3 with the following specifications:

Tank 55-3 has an internal floating roof equipped with a mechanical shoe seal for the storage of gasoline or less volatile petroleum products. The maximum design capacity of the tank is 2,154,894 gallons.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Volatile Organic Compounds (VOC) [326 12, 40 CFR 60.112b and 326 IAC 8-4-3(b)]

Pursuant to 326 IAC 12, 40 CFR 60.112b and 326 IAC 8-4-3(b), Tank 55-3, in order to store gasoline:

a) Shall have a fixed roof in combination with an internal floating roof that shall be floating on the liquid surface at all times, except during initial fill and those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

b) The internal floating roof shall be equipped the above-mentioned mechanical shoe seal or one of the equivalent closure devices as defined in accordance with 40 CFR 60.112b(a)(1)(ii).

D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.4.3 Visual Inspection, Repair, and Notification [326 12, 40 CFR 60.113b]

(a) The internal floating roof storage vessel shall comply with the following testing and procedures requirements (visual inspections, repairs, notifications) of 326 IAC 12, 40 CFR 60.113b.

(b) Pursuant to 326 IAC 12, 40 CFR 60.113b, a visual inspection should be made of the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the vessel with VOL. For storage vessels equipped with a liquid-mounted or mechanical shoe primary seal, visual inspections should be performed annually. For vessels equipped with both primary and secondary seals, a visual inspection should be performed at least every five (5) years.

(c) Pursuant to 326 IAC 12, 40 CFR 60.115b(a)(3), if during the required annual visual inspection, the internal floating roof is not resting on the surface of the VOL, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the vessel from service within forty-five (45) days. Records of such incidents shall be maintained and a report shall be furnished to the department within thirty (30) days of the inspection. The report shall identify the following:

1) The vessel by identification number

2) The nature of the defects

3) The date the vessel was emptied or the nature of and date the repair was made.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.4 There are no compliance monitoring requirements for this facility.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.5 Record Keeping and Reporting Requirements (Tank Inspections) [326 12, 40 CFR 60.115b]

(a) The internal floating roof storage vessel shall comply with the following record keeping and reporting requirements as outlined in 326 IAC 12, 40 CFR 60.115b(a)(2).

(b) Pursuant to 326 IAC 12, 40 CFR 60.115b(a)(2), a record of each inspection performed shall be maintained and shall identify the following:

1) The vessel inspected by identification number.

2) The date the vessel was inspected.

3) The observed condition of each component of the control equipment, including the following: seals, internal floating roof, and fittings.

D.4.6 Record Keeping and Reporting Requirements (Product Storage) [326 12, 40 CFR 60.116b]

(a) The internal floating roof storage vessel shall comply with the following record keeping and reporting requirements as outlined in 326 IAC 12, 40 CFR 60.116b(c), Subpart Kb and 326 IAC 8-4-3(d).

(b) Pursuant to 326 IAC 12, 40 CFR 60.116b(c), Subpart Kb and 326 IAC 8-4-3(d), records of the petroleum liquid stored, the period of storage and the maximum true vapor pressure of that liquid as stored during the respective storage period shall be maintained for a minimum period of two (2) years and made available upon request by IDEM-OAQ or HDEM.

D.4.7 Reporting Requirements [326 12, 40 CFR 60.115b]

A report of any defects (the internal floating roof not resting on the surface of the VOL, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric) discovered shall be furnished to the department within thirty (30) days of the inspection. The report shall identify the vessel identification number, the nature of the defects, and the date the vessel was emptied or the nature of and date the repair was made.

SECTION D.5 FACILITY OPERATION CONDITIONS - INSIGNIFICANT ACTIVITIES

(2) (a) A petroleum liquid storage tank, identified as Tank No. 80-11. The tank has a fixed cone roof and a maximum design capacity of 3,360,000 gallons for storage of jet kerosene with a true vapor pressure of 0.005 psi at 49 °F.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 There are no emission limitations applicable to this facility.

Compliance Determination Requirements

D.5.2 Testing Requirements [326 IAC 2-7-6(1)]

Testing of this facility is not specifically required by this permit. However, this does not preclude testing requirements on this facility under 326 IAC 2-1-4(f) and 326 IAC 2-7-6(1).

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.3 There are no specific compliance monitoring requirements applicable to this facility.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.4 In accordance with 326 IAC 8-9-6(b), records of each vessel including the vessel identification number, dimensions, capacity, and a description of the emission control equipment shall be maintained for the life of the vessel.

D.5.5 In accordance with 40 CFR 60.113(a), records of the types of volatile petroleum liquid stored, the period of storage and the maximum true vapor pressure of the liquid as stored during the respective storage period shall be maintained for a minimum of 24 months and made available upon request by IDEM - OAM or HDEM.

SECTION D.6 FACILITY OPERATION CONDITIONS - INSIGNIFICANT ACTIVITIES

(2)(f) A petroleum liquid storage tank, identified as Tank No. T -13. The tank has an internal floating roof with a mechanical shoe seal. Maximum design capacity is 188,370 gallons for storage of transmix with a true vapor pressure of 2.3 psi at 49 °F.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Volatile Organic Compounds (VOC)

This storage tank is subject to the standards applicable to internal floating roof as outlined in 40 CFR 60.112(a)(1), 326 IAC 8-4-3(b), and 326 IAC 8-9-4(c).

Compliance Determination Requirements

D.6.2 Testing Requirements [326 IAC 2-7-6(1)]

Testing of this facility is not specifically required by this permit. However, this does not preclude testing requirements on this facility under 326 IAC 2-1-4(f) and 326 IAC 2-7-6(1).

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.6.3 There are no specific compliance monitoring requirements applicable to this facility.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.4 In accordance with 326 IAC 8-9-6(b), records of each vessel including the vessel identification number, dimensions, capacity, and a description of the emission control equipment shall be maintained for the life of the vessel.

D.6.5 In accordance with 326 IAC 8-9-6(c), a record of each inspection performed shall be maintained and shall identify the following:

(1) The vessel identification number

(2) The date of the inspection

(3) The observed condition of the seal, internal floating roof, and fittings.

D.6.6 In accordance with 40 CFR 60.113(a) and 326 IAC 8-4-3(d), records of the types of volatile petroleum liquid stored, the period of storage and the maximum true vapor pressure of the liquid as stored during the respective storage period shall be maintained for a minimum of 24 months and made available upon request by IDEM - OAM or HDEM.

D.6.7 Reporting Requirements

A report of any defects (the internal floating roof is not resting on the surface of the VOL, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric) discovered shall be furnished to the department within thirty (30) days of the inspection. The report shall identify the vessel identification number, the nature of the defects, and the date the vessel was emptied or the nature of and date the repair was made.

SECTION D.7 FACILITY OPERATION CONDITIONS - INSIGNIFICANT ACTIVITIES

(2)(e) A petroleum liquid storage tank, identified as Tank No. T-5. The tank has an internal floating roof with a mechanical shoe seal. The maximum design capacity is 67,914 gallons for the storage of transmix with a true vapor pressure of 2.3 psi at 49 °F.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Volatile Organic Compounds (VOC)

This storage tank is subject to the standards applicable to internal floating roof as outlined in 326 IAC 8-4-3(b) and 326 IAC 8-9-4(c).

Compliance Determination Requirements

D.7.2 Testing Requirements [326 IAC 2-7-6(1)]

Testing of this facility is not specifically required by this permit. However, this does not preclude testing requirements on this facility under 326 IAC 2-1-4(f) and 326 IAC 2-7-6(1).

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.7.3 There are no specific compliance monitoring requirements applicable to this facility.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.4 In accordance with 326 IAC 8-9-6(b), records of each vessel including the vessel identification number, dimensions, capacity, and a description of the emission control equipment shall be maintained for the life of the vessel.

D.7.5 In accordance with 326 IAC 8-9-6(c), a record of each inspection performed shall be maintained and shall identify the following:

(1) The vessel identification number

(2) The date of the inspection

(3) The observed condition of the seal, internal floating roof, and fittings.

D.7.6 Records of the types of volatile petroleum liquid stored and the maximum true vapor pressure of the liquid as stored shall be maintained for a minimum of 24 months and made available upon request by IDEM - OAM or HDEM. [326 IAC 8-4-3(d)].

D.7.7 Reporting Requirements

A report of any defects (the internal floating roof is not resting on the surface of the VOL, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric) discovered shall be furnished to the department within thirty (30) days of the inspection. The report shall identify the vessel identification number, the nature of the defects, and the date the vessel was emptied or the nature of and date the repair was made.

SECTION D.8 FACILITY OPERATION CONDITIONS - INSIGNIFICANT ACTIVITIES

Six (6) petroleum liquid storage tanks, identified as Tank Nos. 80-1 80-9, 80-4, AA-1-3, AA-8-1, and AA-8-2.
Tank specifications are as follows:

(2)(b) Tank No. 80-1 has a fixed cone roof and a maximum design capacity of 3,360,000 gallons for storage of No. 2 Fuel Oil with a true vapor pressure of 0.005 psi at 49 °F.

(2)(c) Tank No. 80-9 has a fixed roof and a maximum design capacity of 3,277,596 gallons for storage of No. 2 Fuel Oil with a true vapor pressure of 0.005 psi at 49 °F.

(2)(d) Tank No. 80-4 has a fixed cone roof and a maximum design capacity of 3,360,000 gallons for storage of No. 2 Fuel Oil with a true vapor pressure of 0.005 psi at 49 °F.

(2)(g) Tank No. AA-1-3 is a horizontal fixed roof tank with a maximum design capacity of 462 gallons for storage of Red Dye Additive with a true vapor pressure of 0.06 psia.

(2)(h) Tank No. AA-8-1 has a fixed roof and a maximum design capacity of 7,980 gallons for storage of Gasoline Additive with a true vapor pressure of 2.4 psia.

(2)(i) Tank No. AA-8-2 has a fixed roof and a maximum design capacity of 7,980 gallons for storage of Gasoline Additive with a true vapor pressure of 2.4 psia.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 There are no emission limitations applicable to this facility.

Compliance Determination Requirements

D.8.2 Testing Requirements [326 IAC 2-7-6(1)]

Testing of this facility is not specifically required by this permit. However, this does not preclude testing requirements on this facility under 326 IAC 2-1-4(f) and 326 IAC 2-7-6(1).

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.8.3 There are no specific compliance monitoring requirements applicable to this facility.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.8.4 In accordance with 326 IAC 8-9-6(b), records of each vessel including the vessel identification number, dimensions, capacity, and a description of the emission control equipment shall be maintained for the life of the vessel.

SECTION D.9 FACILITY OPERATION CONDITIONS

(3) One (1) Groundwater Treatment System including an air stripper with a maximum design rate of 1800 gallons per hour. The system is used to remove hydrocarbons on the terminal site.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 Volatile Organic Compounds (VOC) [Hammond Air Quality Ordinance 3522 (as amended)]

Pursuant to the Construction Permit No. 433 and Operation Permit No. 877, the total VOC emissions from the Groundwater Treatment System shall be limited to 1.562 pounds per hour and 6.843 tons per year.

Compliance Determination Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.9.2 Testing Requirements [326 IAC 2-7-6(1)]

A stack test shall be performed to determine the total VOC emissions from the Vapor Extraction System within twenty-four (24) months of issuance of this permit and repeated no less than once every 5 years thereafter. Testing shall be performed in accordance with 326 IAC 3-2.1 using methods acceptable to the Commissioner.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.9.3 At minimum, the influent to and the effluent from the air stripper shall be sampled for total VOC once per calendar quarter.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.9.4 The following process operating records shall be maintained:

(1) Daily operating hours of the air stripper and the vapor extraction system

(2) Daily throughput, in gallons, processed through the air stripping unit

D.9.5 Reporting Requirements [326 IAC 2-7-5(3)]
There are no reporting requirements for this facility.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Marathon Ashland Petroleum LLC
Source Address: 4206 Columbia Avenue, Hammond, Indiana 46327
Mailing Address: 539 South Main Street, Findlay, OH 45840
Part 70 Permit No.: T089-7400-00231

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

_ Annual Compliance Certification Letter

_ Emergency/Deviation Occurrence Reporting Form

_ Test Result (specify)

_ Report (specify)

_ Notification (specify)

_ Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT

COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

5925 Calumet Avenue
Hammond, Indiana 46320
Phone: 219-853-6306
Fax: 219-853-6343

PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT

Source Name: Marathon Ashland Petroleum LLC
Source Address: 4206 Columbia Avenue, Hammond, Indiana 46327
Mailing Address: 539 South Main Street, Findlay, OH 45840
Part 70 Permit No.: T089-7400-00231

This form consists of 2 pages **Page 1 of 2**

Check either No. 1 or No.2
__ 1. This is an emergency as defined in 326 IAC 2-7-1(12) • The Permittee must notify the Office of Air Management (OAM), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and • The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7- 16
__ 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c) • The Permittee must submit notice in writing within ten (**10**) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:
Describe the cause of the Emergency/Deviation:

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:
Title/Position:
Date:
Phone:

Attach a signed certification to complete this report.

OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

PART 70 OPERATING PERMIT
QUARTERLY COMPLIANCE REPORT

Source Name: Marathon Ashland Petroleum LLC
Source Address: 4206 Columbia Avenue, Hammond, Indiana 46327
Mailing Address: 539 South Main Street, Findlay, OH 45840
Part 70 Permit No.: T089-7400-00231

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify zero in the column marked "No Deviations".

LIST EACH COMPLIANCE REQUIREMENT EXISTING FOR THIS SOURCE:

Requirement (eg. Permit Condition D.1.3)	**Number of Deviations**	**Date of each Deviations**	**No Deviations**

Form Completed by:
Title/Position:
Date:
Phone:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Part 70 Recordkeeping Form

Source Name: Marathon Ashland Petroleum LLC
Source Address: 4206 Columbia Avenue, Hammond, Indiana 46327
Mailing Address: 539 South Main Street, Findlay, OH 45840
Part 70 Permit No.: T089-7400-00231
Facility: Air Stripper
Parameter: Process throughput & operating hours
Limit: VOC: 1.562 lbs/hr; 6.843 TPY

Day	Operating Hours	Throughput (gallons)	Day	Operating Hours	Throughput (gallons)
1			17		
2			18		
3			19		
4			20		
5			21		
6			22		
7			23		
8			24		
9			25		
10			26		
11			27		
12			28		
13			29		
14			30		
15			31		
16			Total		

Indiana Department of Environmental Management
Office of Air Quality

and

Hammond Department of Environmental Management
Air Pollution Control Division

Technical Support Document (TSD) for a Part 70
Minor Source Modification and Significant Permit Modification

Source Background and Description

Source Name:	**Marathon Ashland Petroleum, LLC**
Source Location:	4206 Columbia Avenue, Hammond, IN 46327-1487
County:	Lake
SIC Code:	5171 – Bulk Petroleum Storage and Terminal
Operation Permit No.:	**T089-7400-00231**
Operation Permit Issuance Date:	December 30, 1997
Minor Source Modification	**089-16717-00231**
Significant Permit Modification	**089-16719-00231**
Permit Reviewer:	Ronald Holder - HDEM

The Office of Air Quality (OAQ) has reviewed a minor source modification application from Marathon Ashland Petroleum, LLC, relating to the addition of an internal floating roof to an existing fixed cone storage tank identified as Tank 55-3.

History

On October 25, 2002, Marathon Ashland Petroleum, LLC submitted an application to the OAQ requesting to add an internal floating roof to storage tank 55-3 at their terminal in Hammond, Indiana. Marathon was issued a Part 70 permit (T089-7400-00231) on December 30, 1997.

Existing Approvals

The source was issued a Part 70 Operating Permit (T089-7400-00231) on December 30, 1997. The source has since received the following:

(a) First Administrative Amendment (089-9324-00231), issued on March 23, 1998;

(b) Second Administrative Amendment (089-11140-00231), issued on July 20, 1999;

(c) Third Administrative Amendment (089-13941-00231), issued on March 5, 2001; and

(d) Fourth Administrative Amendment (089-14613-00231), issued on August 17, 2001.

Enforcement Issue

There are no enforcement actions pending.

Stack (Tank) Summary (before and after the addition of the internal floating roof)

Stack (Tank) ID	Operation (Storage of)	Tank Height (feet)	Tank Diameter (feet)	Internal Floating Roof and Seal	Capacity (gallons)
55-3 (FCR)	Fuel Oil #2	48'	90'	none	2,242,212
55-3 (IF)	Gasoline	48'	90'	Mechanical Shoe	2,154,894
				Primary Seal	

Recommendation

The staff recommends to the Commissioner that a Minor Source Modification and Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 25, 2002.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (two (2) pages). These calculations confirm the accuracy of the calculations submitted by the applicant.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Increase in Potential To Emit of Fixed Cone Roof Tank 55-3 due to the installation of Internal Float Pan and Mechanical Shoe Seal. Gasoline cannot be stored in a storage tank greater than 39, 000 gallons capacity unless there is an internal floating roof.

Pollutant	Potential To Emit (tons/year)
PM	0
PM-10	0
SO_2	0
VOC	4.25
CO	0
NO_x	0

HAPs	Potential To Emit (tons/year)
Total Combination of HAPs in gasoline (approximately 15%)	0.64

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Minor Source Modification and Significant Permit Modification. The minor source modification is being performed pursuant to 326 IAC 2-7-10.5(d)(6); a modification that is subject to a new source performance standard (NSPS) and the source has acknowledged the requirement to comply with the NSPS; and 326 IAC 2-7-10.5(d)(10); for a source in Lake County with the potential to emit twenty-five (25) ton per year of VOC, any modification that would result in an increase greater than or equal to fifteen (15) pounds per day of VOC. The significant permit modification is being performed pursuant to 326 IAC 2-7-12(b)(1)(E) because the modification to the permit is considered to be a modification under a provision of Title I of the CAA.

Tank 55-3 will be the only tank at this Marathon location "for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984". Therefore, it will be the only tank subject to the NSPS of Subpart Kb of 40 CFR 60. The permit modification will consist of moving Tank 55-3 from Section D.8 to a new Section D.4 in the Marathon Ashland Part 70 permit.

County Attainment Status

This source is located in Lake County. 40 CFR 81.315 – (Indiana) – 7/1/99

Pollutant	Status
PM-10	moderate non-attainment
SO_2	primary non-attainment
NO_2	attainment/unclassifiable
Ozone	severe non-attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as severe non-attainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(b) Lake County has been classified as non-attainment for particulates less than ten (10) microns in diameter (PM_{10}) and sulfur dioxide (SO_2). Therefore, these emissions were also reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

Source Status

Existing Source PSD or Emissions Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	0
PM-10	0
SO_2	0
VOC	> 25
CO	0
NO_x	0
Single HAP	< 10
Combination of HAPs	< 25

(a) This existing source is not a major stationary source **(for the purposes of PSD)** because even though it is one of the 28 listed source categories **(326 IAC 2-2-1(y)(1)(Z))**, no attainment regulated pollutant is emitted at a rate of 100 tons per year or more.

(b) This existing source is a major stationary source **(for the purposes of Emission Offset)** because it has a potential to emit twenty-five (25) tons per year or more of volatile organic compounds (VOC) in a severe non-attainment ozone area **(326 IAC 2-3-1 (t)(2)).**

(c) These emissions are based on the 2001 emission statement submitted by the source.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAP(Pb)
Addition of Internal Floating Roof to Storage Tank 55-3	0	0	0	4.25	0	0	0.0
PSD and Emission Offset Significant Levels	25	15	40	40 *25	100	40	0.6 (lead)

*326 IAC 2-3-1(s) definition major modification, increase that is not de minimis in severe ozone nonattainment area.
*326 IAC 2-3-1(l) definition de minimis, increase of VOC that does not exceed twenty-five (25) tons per year.

This modification to an existing major stationary source is not major because the emissions increase is "de minimis" for this severe ozone nonattainment area. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Federal Rule Applicability

NSPS

Tank 55-3 will be subject to the New Source Performance Standards (NSPS) in 326 IAC 12, (40 CFR 60.112b, Subpart (Kb), for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) because "construction, reconstruction, or modification commenced after July 23, 1984." The installation of the internal floating roof is considered a modification because the potential to emit of VOC increases because the tank will qualify for gasoline storage whereas without the internal floating roof gasoline storage was not allowed.

a) This rule requires that volatile organic liquid storage vessels with a capacity equal to or greater than 151 cubic meters (39,000 gallons) containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa (0.75 psi) but less than 76.6 kPa (11 psi), shall be equipped with an internal floating roof with appropriate primary and/or secondary seals.

b) Marathon Ashland Petroleum, LLC is adding an internal floating roof to Tank 55-3. The tank will have an internal floating roof with a mechanical shoe seal, qualifying it to service gasoline and less volatile petroleum products. The source has acknowledged the NSPS requirements in their request for this modification.

c) Tank 55-3 will be the only tank at this Marathon location "for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984". Therefore, it will be the only tank subject to 40 CFR 60, Subpart Kb. The permit modification will

consist of moving Tank 55-3 from Section D.8 to a new Section D.4 in the Part 70 permit for this source.

NESHAPS

There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

State Rule Applicability

326 IAC 2-6 (Emission Reporting)

Tank 55-3 will remain subject to 326 IAC 2-6 (Emission Reporting), because the source emits more than 10 tons/yr of VOC in Lake County. Pursuant to this rule, the source must annually submit an emission statement of the facility. The annual statement must be received by April 15 of each year and must contain the minimum requirements as specified in 326 IAC 2-6-4.

Marathon submits an annual emission statement that includes all petroleum liquid storage tanks.

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)

Tank 55-3 will be subject to the standards, record keeping, and reporting requirements of 326 IAC 8-4-3, which are similar to the New Source Performance Standards in 40 CFR 60, Subpart Kb.

These standards and requirements will be included in the new Section D of the Part 70 permit. Compliance with the above-mentioned NSPS will meet the requirements of 326 IAC 8-4-3.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

326 IAC 8-9-2(8) exempts this stationary vessel from the standards and requirements in 326 IAC 8-9 because the vessel is subject to the provisions of 40 CFR 60, Subpart Kb, New Source Performance Standards for Volatile Organic Liquid Storage.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance determination requirements applicable to this modification are as follows:

Internal Floating Roof Tank 55-3 shall comply with the visual inspection and repair requirements of 326 12, 40 CFR 60.113b and the record keeping and reporting requirements of 326 IAC 12, 40 CFR 60.115b. Marathon Ashland Petroleum, LLC shall also comply with the record keeping and reporting requirements of 326 IAC 12, 40 CFR 60.116b, and 326 IAC 8-4-3(d).

There are no compliance monitoring requirements for this tank.

Tank 55-3 will be the only tank at this Marathon location "for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984". Therefore, it will be the only tank subject to 40 CFR 60, Subpart Kb. The permit modification will consist of moving Tank 55-3 from Section D.8 to a new Section D.4 in the Part 70 permit for this source.

Minor Source Modification 089-16717-00231 and Significant Permit Modification 089-16719-00231
Part 70 Permit pages affected 1, 4, 5, 7, 36, 38-45.

The following changes were made to the Part 70 Permit T089-7400-00231. **Bold** indicates the items that were added and ~~strike-outs~~ indicate the items that were removed.

1. The cover page (page 1) was modified to add the issuance date of the first significant permit modification (089-16719-00231), and to show the affected pages.

2. On page 4 of 45, in the Table of Contents, Tank 55-3 replaces the Groundwater Treatment System in Section D.4 and the Groundwater Treatment System is moved to a new Section D.9 in order to be consistent with the order of emission units in Section A, Source Summary.

~~**D.4 FACILITY OPERATION CONDITIONS INSIGNIFICANT ACTIVITIES Groundwater Treatment System** 36~~

~~**Emission Limitations and Standards [326 IAC 2-7-5(1)]**~~
~~D.4.1 Volatile Organic Compounds (VOC)~~

~~**Compliance Determination Requirements**~~
~~D.4.2 Testing Requirements [326 IAC 2-7-6(1)]~~

~~**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**~~
~~D.4.3 Monitoring~~

~~**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**~~
~~D.4.4 Operating Records~~
~~D.4.5 Reporting Requirements~~

D.4 FACILITY OPERATION CONDITIONS - Storage Tank 55-3 **37**

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.4.1 Volatile Organic Compounds (VOC) [326 IAC 12, 40 CFR 60.112b] [326 IAC 8-4-3(b)]
D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements
D.4.3 Visual Inspection, Repair, & Notification [326 IAC 12, 40 CFR 60.113b]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.4.4 Monitoring

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.4.5 Record Keeping and Reporting Requirements (Tank Inspections) [326 IAC 12, 40 CFR 60.115b]
D.4.6 Record Keeping and Reporting Requirements (Product Storage) [326 IAC 12, 40 CFR 60.116b]
D.4.7 Reporting Requirements [326 IAC 12, 40 CFR 60.115b]

3. On page 5 of 45, in the Table of Contents, Tank 55-3 was removed from Section D.8, Facility Operation Conditions, as follows:

D.8 FACILITY OPERATION CONDITIONS - INSIGNIFICANT ACTIVITIES - Tank No. ~~55-3,~~ 80-1, 80-9, 80-4, AA-1-3, AA-8-1, & AA-8-2

4. On page 5 of 45, in the Table of Contents, Section D.9 was added for the Groundwater Treatment System that was displaced from page 4 to maintain the order of emission units as presented in Section A, Source Summary.

D.9 FACILITY OPERATION CONDITIONS - INSIGNIFICANT ACTIVITIES - Groundwater Treatment System

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.9.1 Volatile Organic Compounds (VOC) [Hammond Air Quality Control Ordinance 3522 (as amended)]

Compliance Determination Requirements
D.9.2 Testing Requirements [326 IAC 2-7-6(1)]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.9.3 Monitoring

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.9.4 Operating Records
D.9.5 Reporting Requirements

5. On page 7 of 45, in Section A, Source Summary, A.2, Emission Units and Pollution Control Equipment Summary, item (4) was added as follows to include Tank 55-3:

(4) One (1) Petroleum Liquid Storage Tank, identified as Tank 55-3 with the following specifications:

Tank 55-3 has an internal floating roof equipped with a mechanical shoe seal for the storage of gasoline or less volatile petroleum products. The maximum design capacity of the tank is 2,154,894 gallons.

6. On page 7 of 45, in Section A, Source Summary, A.3, Specifically Regulated Insignificant Activities, item (2)(b), Tank 55-3, was removed and the remaining tanks were re-designated as follows:

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons. This includes storage Tank No. AA-1-3, a fixed cone roof tank with a maximum design capacity of 462 gallons.

(2) The following storage tanks which emit less than one (1) ton per year of a single HAP and less than fifteen (15) pounds per day of VOC:

(a) Fixed-cone roof Kerosene storage tank No. 80-11 with a maximum design capacity of 3,360,000 gallons.

~~(b) Fixed-cone roof Kerosene storage tank No. 55-3 with a maximum design capacity of 2,154,894 gallons.~~

~~(c)~~ **(b)** Fixed-cone roof #2 fuel oil storage tank No. 80-1 with a maximum design capacity of 3,360,000 gallons.

~~(d)~~ **(c)** Fixed-cone roof #2 fuel oil storage tank No. 80-9 with a maximum design capacity of 3,277,596 gallons.

~~(e)~~ **(d)** Fixed-cone roof #2 fuel oil storage tank No. 80-4 with a maximum design capacity of 3,360,000 gallons.

~~(f)~~ **(e)** Internal floating roof transmix storage tank No. T-5 with a maximum design capacity of 67,914 gallons. This tank is equipped with a mechanical shoe seal.

~~(g)~~ **(f)** Internal floating roof transmix storage tank No. T-13 with a maximum design capacity of 188,370 gallons. This tank is equipped with mechanical shoe seal.

~~(h)~~ **(g)** Horizontal fixed roof red dye additive storage tank No. AA-1-3 with a maximum design capacity of 462 gallons.

~~(i)~~ **(h)** Fixed-cone roof gasoline additive storage tank No. AA-8-1 with a maximum design capacity of 7,980 gallons.

~~(j)~~ **(i)** Fixed-cone roof gasoline additive storage tank No. AA-8-2 with a maximum design capacity of 7,980 gallons.

7. On page 36 of 45, Section D.4, Tank 55-3 replaces the Groundwater Treatment System as follows. The Groundwater Treatment System is moved to a new Section (D.9) in order to be consistent with the order of emission units in Section A, Source Summary.

Remove:

~~**SECTION D.4 FACILITY OPERATION CONDITIONS**~~

~~(4) One (1) Groundwater Treatment System including an air stripper with a maximum design rate of 1800 gallons per hour. The system is used to remove hydrocarbons on the terminal site.~~

~~**Emission Limitations and Standards [326 IAC 2-7-5(1)]**~~

~~D.4.1 Volatile Organic Compounds (VOC)~~

~~Pursuant to the Construction Permit No. 433 and Operation Permit No. 877, the total VOC emissions from the Groundwater Treatment System shall be limited to 1.562 pounds per hour and 6.843 tons per year.~~

~~**Compliance Determination Requirements**~~

~~D.4.2 Testing Requirements [326 IAC 2-7-6(1)]~~

~~A stack test shall be performed to determine the total VOC emissions from the Vapor Extraction System within twenty-four (24) months of issuance of this permit and repeated no less than once every 5 years thereafter. Testing shall be performed in accordance with 326 IAC 3-2.1 using methods acceptable to the Commissioner.~~

~~**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**~~

~~D.4.3 At minimum, the influent to and the effluent from the air stripper shall be sampled for total VOC once per calendar quarter.~~

~~**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**~~

~~D.4.4 The following process operating records shall be maintained:~~

~~(1) Daily operating hours of the air stripper and the vapor extraction system~~

~~(2) Daily throughput, in gallons, processed through the air stripping unit~~

~~D.4.5 Reporting Requirements~~
~~There are no reporting requirements for this facility.~~

Add:

SECTION D.4 FACILITY OPERATION CONDITIONS

One (1) Petroleum Liquid Storage Tank, identified as Tank 55-3 with the following specifications:

Tank 55-3 has an internal floating roof equipped with a mechanical shoe seal for the storage of gasoline or less volatile petroleum products. The maximum design capacity of the tank is 2,154,894 gallons.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Volatile Organic Compounds (VOC) [326 IAC 12, 40 CFR 60.112b and 326 IAC 8-4-3(b)]

Pursuant to 326 IAC 12, 40 CFR 60.112b and 326 IAC 8-4-3(b), Tank 55-3, in order to store gasoline:

a) Shall have a fixed roof in combination with an internal floating roof that shall be floating on the liquid surface at all times, except during initial fill and those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

b) The internal floating roof shall be equipped the above-mentioned mechanical shoe seal or one of the equivalent closure devices as defined in accordance with 40 CFR 60.112b(a)(1)(ii).

D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.4.3 Visual Inspection, Repair, and Notification [326 IAC 12, 40 CFR 60.113b]

(a) The internal floating roof storage vessel shall comply with the following testing and procedures requirements (visual inspections, repairs, notifications) of 326 IAC 12, 40 CFR 60.113b.

(b) Pursuant to 326 IAC 12, 40 CFR 60.113b, a visual inspection should be made of the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the vessel with VOL. For storage vessels equipped with a liquid-mounted or mechanical shoe primary seal, visual inspections should be performed annually. For vessels equipped with both primary and secondary seals, a visual inspection should be performed at least every five (5) years.

(c) Pursuant to 326 IAC 12, 40 CFR 60.115b(a)(3), if during the required annual visual inspection, the internal floating roof is not resting on the surface of the VOL, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the vessel from service within forty-five (45) days. Records of such incidents shall be maintained and a report shall be furnished to the department within thirty (30) days of the inspection. The report shall identify the following:

1) The vessel by identification number

2) The nature of the defects

3) The date the vessel was emptied or the nature of and date the repair was made.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.4 There are no compliance monitoring requirements for this facility.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.5 Record Keeping and Reporting Requirements (Tank Inspections) [326 IAC 12, 40 CFR 60.115b]

(a) The internal floating roof storage vessel shall comply with the following record keeping and reporting requirements as outlined in 326 IAC 12, 40 CFR 60.115b(a)(2).

(b) Pursuant to 326 IAC 12, 40 CFR 60.115b(a)(2), a record of each inspection performed shall be maintained and shall identify the following:

1) The vessel inspected by identification number.

2) The date the vessel was inspected.

3) The observed condition of each component of the control equipment, including the following: seals, internal floating roof, and fittings.

D.4.6 Record Keeping and Reporting Requirements (Product Storage) [326 IAC 12, 40 CFR 60.116b]

(a) The internal floating roof storage vessel shall comply with the following record keeping and reporting requirements as outlined in 326 IAC 12, 40 CFR 60.116b(c), Subpart Kb and 326 IAC 8-4-3(d).

(b) Pursuant to 326 IAC 12, 40 CFR 60.116b(c), Subpart Kb and 326 IAC 8-4-3(d), records of the petroleum liquid stored, the period of storage and the maximum true vapor pressure of that liquid as stored during the respective storage period shall be maintained for a minimum period of two (2) years and made available upon request by IDEM-OAQ or HDEM.

D.4.7 Reporting Requirements [326 IAC 12, 40 CFR 60.115b]

A report of any defects (the internal floating roof not resting on the surface of the VOL, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric) discovered shall be furnished to the department within thirty (30) days of the inspection. The report shall identify the vessel identification number, the nature of the defects, and the date the vessel was emptied or the nature of and date the repair was made.

8. On page 38 of 45, in Section D.6, Facility Operation Conditions – Insignificant Activities, item (2)(g) in the facility description box, is changed to (2)(f) as follows due to the removal of Tank 55-3 from that part of Section A:

(2)~~(g)~~**(f)** A petroleum liquid storage tank, identified as Tank No. T -13. The tank has an internal floating roof with a mechanical shoe seal. Maximum design capacity is 188,370 gallons for storage of transmix with a true vapor pressure of 2.3 psi at 49 °F.

9. On page 39 of 45, in Section D.7, Facility Operation Conditions – Insignificant Activities, item (2)(f) in the facility description box, is changed to (2)(e) as follows due to the removal of Tank 55-3 from that part of Section A:

(2)~~(f)~~**(e)** A petroleum liquid storage tank, identified as Tank No. T-5. The tank has an internal floating roof with a mechanical shoe seal. Maximum design capacity is 67,914 gallons for storage of transmix with a true vapor pressure of 2.3 psi at 49 °F.

10. On page 40 of 45, in Section D.8, Facility Operation Conditions – Insignificant Activities, item (2)(b), Tank 55-3, was removed and the remaining tanks were re-designated as follows:

~~Seven (7)~~ **Six (6)** petroleum liquid storage tanks, identified as Tank Nos. ~~55-3,~~ 80-1 80-9, 80-4, AA-1-3, AA-8-1, and AA-8-2. Tank specifications are as follows: ~~(2)(b) Tank No. 55-3 has a fixed cone roof and a maximum design capacity of 2,154,894 gallons for storage of Jet kerosene with a true vapor pressure of 0.005 psi at 49 °F.~~ (2)~~(c)~~ **(b)** Tank No. 80-1 has a fixed cone roof and a maximum design capacity of 3,360,000 gallons for storage of No. 2 Fuel Oil with a true vapor pressure of 0.005 psi at 49 °F. (2)~~(d)~~ **(c)** Tank No. 80-9 has a fixed roof and a maximum design capacity of 3,277,596 gallons for storage of No. 2 Fuel Oil with a true vapor pressure of 0.005 psi at 49 °F. (2)~~(e)~~ **(d)** Tank No. 80-4 has a fixed cone roof and a maximum design capacity of 3,360,000 gallons for storage of No. 2 Fuel Oil with a true vapor pressure of 0.005 psi at 49 °F. (2)~~(h)~~ **(g)** Tank No. AA-1-3 is a horizontal fixed roof tank with a maximum design capacity of 462 gallons for storage of Red Dye Additive with a true vapor pressure of 0.06 psia. (2)~~(i)~~ **(h)** Tank No. AA-8-1 has a fixed roof and a maximum design capacity of 7,980 gallons for storage of Gasoline Additive with a true vapor pressure of 2.4 psia. (2)~~(j)~~ **(i)** Tank No. AA-8-2 has a fixed roof and a maximum design capacity of 7,980 gallons for storage of Gasoline Additive with a true vapor pressure of 2.4 psia.

11. On page 41 of 45, the Groundwater Treatment System, formerly Section D.4, is moved to this new Section D.9 and a typographical error is corrected in order to be consistent with the order of emission units in Section A, Source Summary.

Add:

SECTION D.9 FACILITY OPERATION CONDITIONS

~~(4)~~ (3) One (1) Groundwater Treatment System including an air stripper with a maximum design rate of 1800 gallons per hour. The system is used to remove hydrocarbons on the terminal site.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 Volatile Organic Compounds (VOC) [Hammond Air Quality Ordinance 3522 (as amended)]

Pursuant to the Construction Permit No. 433 and Operation Permit No. 877, the total VOC emissions from the Groundwater Treatment System shall be limited to 1.562 pounds per hour and 6.843 tons per year.

Compliance Determination Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.9.2 Testing Requirements [326 IAC 2-7-6(1)]

A stack test shall be performed to determine the total VOC emissions from the Vapor Extraction System within twenty-four (24) months of issuance of this permit and repeated no less than once every 5 years thereafter. Testing shall be performed in accordance with 326 IAC 3-2.1 using methods acceptable to the Commissioner.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.9.3 At minimum, the influent to and the effluent from the air stripper shall be sampled for total VOC once per calendar quarter.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.9.4 The following process operating records shall be maintained:

(1) Daily operating hours of the air stripper and the vapor extraction system

(2) Daily throughput, in gallons, processed through the air stripping unit

D.9.5 Reporting Requirements [326 IAC 2-7-5(3)]
There are no reporting requirements for this facility.

12. The record keeping and reporting forms on pages 41 through 45 were moved to 44 through 48 and the permit was re-paginated due to the addition of Section D.9.

All other sections of the permit and their corresponding conditions shall remain unchanged and in effect.

Conclusion

The construction of this proposed modification (addition of an internal floating roof to Tank 55-3) shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification **089-16717-00231** and Significant Permit Modification **089-16719-00231**.

Hammond Department of Environmental Management
Emission Inventory System Update (EIS)
Storage of Organic Liquids ... AP-42 ... Section 7

Tank 55-3 - Current Service - Vertical Fixed Roof Tank with Fuel Oil #2

Minor Source Modification 089-16717-00231 and Significant Permit Modification 089-16719-00231

General Information:

Company Name	Marathon Ashland Petroleum, LLC	
Year of Data	review	
Plant ID #	089-00231	

Tank Information:

Tank ID #	55-3	
Tank Shell Diameter	90	feet
Tank Shell Height	48	feet
Tank Capacity (max liquid)	2,242,212	gallons

Product Information:

Product Stored	Fuel Oil #2	
*Vapor Molecular Weight	130.0	lb/lb-mole
*True Vapor Pressure @ 60° F	0.0074	psia - @ 60° F
*True Vapor Pressure @ 40° F	0.0031	psia - @ 40° F
Annual Product Throughput	36,480,789	gallons/yr
Average Annual Liquid Height	23	feet

(If unknown, use half of tank shell height.)

*This product information available in the AP-42, Section 7.
*if tank is not white, or if it contains crude oils - see calculations

Ls = Standing Storage Losses =	0.1795	Tons/yr
Lw = Working Losses =	0.4178	Tons/yr
Lt = Ls + Lw = Total Losses =	**0.5973**	**Tons/yr**

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See AP-42, Section 7, for clarification of the following calculations:

Ls = Standing Storage Losses = 365*(Vv)*(Wv)*(Ke)*(Ks)

Hr = tank roof height = Sr*Rs = 0.0625*(D/2) =	2.813	feet
Hro = roof outage = Hr/3 =	0.938	feet
Hl = liquid height (1/2 tank height if unknown) =	23.000	feet
Hs = tank shell height =	48.000	feet
Hvo = vapor space outage = Hs - Hl + Hro =	25.938	feet
D = tank diameter =	90.000	feet
Vv =Tank Vapor Space Volume = (π/4)*(D^2)*(Hvo) =	165007.245	cft

Mv = vapor molecular weight (Tables 7.1-2 & 3)	130.0	lb/lb-mole
Pva = vapor pressure at TLa (Tables 7.1-2 & 3)	0.0074	psia @ 50-60°F
TLa = daily average liquid surface temperature°R as calculated for Chicago area using AP-42, Section 7	510.843	°R
Wv = Vapor Density = (Mv*Pva)/(10.731*TLa) =	0.0001755	lb/cft

ΔTa = daily ambient temp range (Chgo area) =	19.00	°R
∂ = tank paint solar absorptance (Table 7.1-7)=	0.17	dimensionless
***(this factor (∂) will change for non-white tanks)**		
I = daily total solar insolation factor (Chgo) =	1215	Btu/sqft•day
ΔTv = daily vapor temp range = = 0.72*(ΔTa) + 0.028*(∂)*(I) =	19.4634	°R
TLa = daily average liquid surface temp °R	510.843	°R
ΔPv = daily vpr pres range = Pv@60-Pv@40 =	0.0043	psia
ΔPb = breather vent pressure setting range =	0.06	psig
Pa = atmospheric pressure =	14.7	psia
Pva = vapor pressure at TLa (Tables 7.1-2 & 3)	0.0074	psia
Ke = Vapor Space Expansion Factor = (ΔTv/TLa) + (ΔPv-ΔPb)/(Pa-Pva) =	0.034310	dimensionless

Ks = Vented Vapor Saturation Factor = 1/(1+ 0.053*Pva*Hvo) =	0.989930	dimensionless

Ls = Standing Storage Losses, lb/yr

Ls = 365*(Vv)*(Wv)*(Ke)*(Ks)

Ls = 358.974 lb/yr

See AP-42, Section 7, for clarification of the following calculations:

Lw = Working Losses = 0.0010*(Mv)*(Pva)*(Q)*(Kn)*(Kp)

Q = annual net thruput, bbl/yr - (42 gal/bbl) =	868,590.2	bbl/yr
VLx = tank max liquid volume - (7.481 gal/cft)	299,720.9	cft
N = # of turnovers per year = 5.614*Q/VLx =	16.3	dimensionless
Kn = turnover factor, =1 unless N>36	1.0000	dimensionless
Kp = working loss product factor =	1.00	dimensionless

*** Kp = 0.75 for crude oils,**
1.0 for all other products

Lw = Working Losses, lb/yr

Lw = 0.0010*(Mv)*(Pva)*(Q)*(Kn)*(Kp)

Lw = 835.584 lb/yr

The End

Hammond Department of Environmental Management
Emission Inventory System Update (EIS)
Storage of Organic Liquids ... AP-42 ... Section 7

Tank 55-3 - Proposed Service - Internal Float Roof Tank with Gasoline

Minor Source Modification 089-16717-00231 and Significant Permit Modification 089-16719-00231

General Information:

Company Name	**Marathon Ashland Petroleum, LLC**	
Year of Data	**review**	
Plant ID #	089-0231	

Tank Information:

Tank ID #	**55-3**	
Tank Shell Diameter.....	90	feet
Tank Shell Height.....	48	feet
*Tank Shell Type (Welded or Riveted).....	Welded	
*Tank Deck Type (Welded or Bolted).....	Welded	
*Tank Rim Seal Type.....	Mechanical Shoe	
Tank Capacity (max liquid).....	2,154,894	gallons

Product Information: **

Product Stored.....	gasoline	
Vapor Molecular Weight.....	67.0	lb/lb-mole
True Vapor Pressure @ 60° F.....	6.0	psia - @ 60° F
Average Organic Liquid Density.....	5.6	lb/gal
Annual Product Throughput.....	129,293,640	gallons/yr

*if this information changes, see calculations
if tank contains crude oil, see calculations
**This product information available in the AP-42, Section 7.

Lr =	Rim Seal Loss =	1.179	Tons/yr
Lwd =	Withdrawal Loss =	0.145	Tons/yr
Lf =	Deck Fitting Losses =	2.964	Tons/yr
Ld =	Deck Seam Loss =	0.000	Tons/yr
Lt = Lr + Lwd + Lf = Total Loss =		**4.287**	**Tons/yr**

RH 10/28/02

See AP-42, Section 7, for clarification of the following calculations:
* asterisked items change with rim seal information (see AP-42, Section 7)

Rim Seal Loss:

*	Kr = seal factor (see Table 7.1-14) =	3.0	lb-mole/ft•yr
	P* = vapor pres. function - Equation (3-3) =	0.130385	dimensionless
	D = tank diameter =	90	feet
	Mv = vapor molecular weight (Table 7.1-3)	67.00	lb/lb-mole
crude?	Kc = product factor, Kc = 0.4 for crude oils, Kc = 1 for all other organic liquids	1.0	

Lr = Rim Seal Loss = (Kr)*(P*)*(D)*(Mv)*(Kc) = 2358.658 lb/yr

Withdrawal Loss:

Q = annual throughput, (42 gal/bbl) =	3078420	bbl/yr
WL = ave. organic liquid density (Table 7.1-3) =	5.6	lb/gal
D = tank diameter =	90	feet
Nc = number of columns =	6	
C = shell clingage factor, (see Table 7.1-10) =	0.0015	bbl/1000 sqft
C = 0.006 for crude oil		

Lwd =
Withdrawal Loss = (0.943*Q*C*WL/D)(1+Nc/D) = 289.005 lb/yr

Deck Fitting Loss:

Ff = total deck fitting loss factor (Table 7.1-16) =	678.5	lb-mole/yr
(go to cell G47)		
P*,Mv, and Kc as defined in above calculations		

Lf = Deck Fitting Losses = (Ff)*(P*)*(Mv)*(Kc) = 5927.220 lb/yr

Deck Seam Loss:

Kd = deck seam loss per unit seam length factor=	0.00	lb/mole/ft-yr
(0.0 for welded deck, 0.34 for bolted deck)		
Sd = deck seam length factor =	0.2	ft/sqft
D,P*,Mv, and Kc are as defined above		

Ld =
Deck Seam Loss = (Kd)*(Sd)*(D^2)*(P*)*(Mv)*(Kc)= 0.000 lb/yr

Tanks with welded decks do not have deck seam losses

The End

Appendix A

Kr
VMP = 6.7
LMP = 3.0
VMP w/sec = 2.5
LMP w/sec = 1.6
MechShoe = 3.0
MS w/sec = 1.6

Summary of Internal Float Roof Tank Deck Fitting Loss Factors
for typical numbers based on tank diameter, see AP-42, Table 7.1-16
if tank-specific data is unavailable use Figures 7.1-24 and 25

Deck Fitting Type	Quantity	Factor	Total
Access Hatch:			
Bolted Cover, Gasketed	0	1.6	0
Unbolted Cover, Gasketed	0	11	0
Unbolted Cover, Ungasketed	1	25	25
Automatic Gauge Float Well:			
Bolted Cover, Gasketed	0	5.1	0
Unbolted Cover, Gasketed	0	15	0
Unbolted Cover, Ungasketed	1	28	28
Column Well:			
Builtup Column - Sliding cover, Gasketed	0	33	0
Builtup Column - Sliding Cover, Ungasketed	6	47	282
Pipe Column - Flexible Fabric Sleeve Seal	0	10	0
Pipe Column - Sliding Cover, Gasketed	0	19	0
Pipe Column - Sliding Cover, Ungasketed	0	32	0
Ladder Well:			
Sliding Cover, Gasketed	0	56	0
Sliding Cover, Ungasketed	1	76	76
Roof Leg or Hanger Well:			
Adjustable	28	7.9	221.2
Fixed	0	0	0
Sample Pipe or Well:			
Slotted Pipe - Sliding Cover, Gasketed	0	44	0
Slotted Pipe - Sliding Cover, Ungasketed	0	57	0
Sample Well - Slit Fabric Seal, (10% open area)	1	12	12
Stub Drain, 1" diameter	28	1.2	33.6
Vacuum Breaker:			
Weighted Mechanical Actuation, Gasketed	1	0.7	0.7
Weighted Mechanical Actuation, Ungasketed	0	0.9	0
Total Deck Fitting Loss Factor (Ff) =			**678.5**